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FROM: Winston Hsu, PATENT AGENT, REG. NO. : 41,526

SERIAL NO.: 10/604,855

ATTORNEY DOCKET NO.: ADTP0091USA

SUBJECT: INFORMATION DISCLOSURE STATEMENT

TOTAL PAGES: 21 PAGES (INCLUDING COVER PAGE)

Winston Hsu 2004/05/11

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PTO/SB/97 (08-00)
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APPLICATION NUMBER: 10/604,855

PAPERS INCLUDED:

(1) Transmittal Form	1 PAGE
(2) Fee Transmittal	1 PAGE
(3) Information Disclosure Statement	17 PAGES

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/604,855	
	Filing Date	08/21/2003	
	First Named Inventor	Chien-Sheng Yang	
	Art Unit	2856	
	Examiner Name		
Total Number of Pages in This Submission	19	Attorney Docket Number	ADTP00911SA

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
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<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Winston Hsu, Reg. No.: 41,526
Signature	<i>Winston Hsu</i>
Date	5/11/2004

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Typed or printed name	
Signature	Date

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (10-03)

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FEE TRANSMITTAL
for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 0.00**Complete if Known**

Application Number	10/604,855
Filing Date	08/21/2003
First Named Inventor	Chien-Sheng Yang
Examiner Name	
Art Unit	2856
Attorney Docket No.	ADTP0091ISA

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:

Deposit Account Number	50-3105
Deposit Account Name	North America Intellectual Property Corp.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below. ☒ Credit any overpayments.☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$) 0.00**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	
Multiple Dependent Claims	-3** =	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	2053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(e))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00**SUBMITTED BY**

Name (Print/Type)	Winston Hsu	Registration No. (Attorney/Agent)	41,526	Telephone	886289237350
Signature	<i>Winston Hsu</i>	Date	8/11/2004		

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant: Chien-Sheng Yang

5 Filing Date: 08/21/2003

Art Unit: 2856

Application No.: 10/604,855

Docket

No.:

ADTP0091USA

MAY 11 2004
OFFICIAL

10 Title: CAPACITIVE ACCELERATION SENSOR

To: Commissioner for Patents

P.O. Box 1450

Alexandria VA 22313-1450

15

Subject: Information Disclosure Statement under 37
C.F.R. §1.56.

Dear Sir:

20

This is an Information Disclosure Statement in
accordance with the duty to disclose information
material to patentability under 37 C.F.R. §1.56.
Applicant wishes to make of record the document listed
25 on the accompanying form PTO/SB/08. It is respectfully
requested that the examiner initials the cited
reference on the form and that it be made of record
in the application and that a copy of the initialed
form be sent to the applicant with the next
30 communication from the examiner.

Since the IDS is filed before the mailing date of

a first Office action on the merits, consideration of the information disclosure statement is hereby requested according to 37 C.F.R. §1.97(b). The prior art patent contained in the information disclosure statement was cited in communications from the Taiwan Intellectual Property Office on Apr. 21, 2004. Applicant sincerely hopes that the examiner can consider the item contained in the information disclosure statement.

10

According to the requirement set forth in 37 C.F.R. §1.98 and M.P.E.P. 609 (8th edition, Aug.-2001), the applicant is submitting copies of the cited reference (Taiwan Patent publication No. 230,237, published Sep 11, 1994) and a concise explanation of the relevance in this application hereinafter.

TW Patent 230,237 discloses an acceleration sensor having a mass part fashioned at springs as micromechanical components in the silicon layer on a SOI substrate, and piezo-resistors for detecting an excursion of the mass part (Abstract). This reference has never disclosed structure of the present application, such as the non-single-crystal-silicon-based substrate, the polysilicon beam structure, the polysilicon supporter, the stationary electrode, the plate capacitor, or the thin film transistor. The reference patent is obviously different from the present application.

30

The disadvantages of using polysilicon material as an acceleration sensor is mentioned in the reference.

But the mentioned disadvantages are directed against the silicon micromechanical device disclosed in IEEE spectrum, Jul. 1990, page 29-35, and cannot be extended to all acceleration sensors using the polysilicon material.

Independent claims 1 and 11 of the present application are repeated below for reference:

- 10 1. A capacitive acceleration sensor comprising:
a non-single-crystal-silicon-based substrate;
a polysilicon beam structure having a movable
section, the movable section comprising a
movable electrode;
15 a polysilicon supporter positioned on the
non-single-crystal-silicon-based substrate
for fixing the beam structure and forming a
distance between the beam structure and the
non-single-crystal-silicon-based
20 substrate;
a stationary electrode positioned on the
non-single-crystal-silicon-based substrate
and opposite to the movable section of the
beam structure, the stationary electrode and
25 the movable electrode constituting a plate
capacitor; and
a thin film transistor (TFT) control circuit
positioned on the
non-single-crystal-silicon-based substrate
30 and electrically connected to the plate
capacitor.

11. A capacitive acceleration sensor comprising:
- an insulating substrate;
 - a cantilever beam structure positioned on the insulating substrate having a movable section, the movable section comprising a movable electrode;
 - a stationary electrode positioned on the insulating substrate and opposite to the movable section of the cantilever beam structure, the stationary electrode and the movable electrode constituting a plate capacitor; and
 - a control circuit positioned on the insulating substrate and electrically connected to the plate capacitor.

Since claims of the present application are substantially different from the prior art patent TW 230,237, a quick allowance of the present application is sincerely requested.

Respectfully Submitted,

25 Winston Hsu Date: 5/11/2004

Winston Hsu, Patent Agent No. 41,526

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(Please contact me by e-mail if you need a telephone communication and I will return your call promptly.)